



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,001	02/08/2002	Billy Hogan	HWB 2380-604	6407
23117 7590 04/16/2007 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			EXAMINER	
			NGUYEN, KHAI MINH	
			ART UNIT	PAPER NUMBER
			2617	
SHORTENED STATUTORY PERIO	OD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
3 MONTHS	DD OF RESPONSE	04/16/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
	10/068,001	HOGAN ET AL.
Office Action Summary	Examiner	Art Unit
	Khai M. Nguyen	2617
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the o	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  B6(a). In no event, however, may a reply be tiruly apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).
Status		Ç.**
1) ⊠ Responsive to communication(s) filed on <u>06 Fe</u> 2a) □ This action is <b>FINAL</b> . 2b) ⊠ This     3) □ Since this application is in condition for allowant closed in accordance with the practice under E	action is non-final.  nce except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 1-19,42-72 and 87-89 is/are pending i 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6,15,16,18,42-45,50,51,54-59,66-69 7) ☐ Claim(s) 7-14,17,19,46-49,52-53,60-65,70 and 8) ☐ Claim(s) are subject to restriction and/or	on from consideration.  9,71 and 87-89 is/are rejected.  72 is/are objected to.	
	_	
<ul> <li>9) The specification is objected to by the Examiner</li> <li>10) The drawing(s) filed on is/are: a) access</li> <li>Applicant may not request that any objection to the objected drawing sheet(s) including the correction</li> <li>11) The oath or declaration is objected to by the Examiner</li> </ul>	epted or b) objected to by the drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ejected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Applicat ity documents have been receive (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate

Art Unit: 2617

#### **DETAILED ACTION**

## **Response to Arguments**

1. Applicant's argument with respect to claim 1-19, 42-72 and 87-89 have been considered but are most in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6, 15-16, 18, 42-45, 50-51, 54-59, 66-69, 71 and 87-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koo et al. (U.S.Pat-6889040) in view of Mouly et al. (U.S.Pat-7184771).

Regarding claim 1, Koo teaches a telecommunications network comprising a radio access network which generates and transmits (fig.1), in a broadcast channel over an air interface (fig.1, element 14, 16), an access group eligibility message which enables a user equipment unit (fig.1, mobile station 12) which receives the access group eligibility message to make a determination whether the user equipment unit is eligible to operate in a cell for which the access group eligibility message is transmitted (fig.1-2, abstract, col.1, lines 48-54), the determination involving a comparison of access group eligibility information transmitted in the access group message and an access group classification (fig.1-2, abstract, col.1, lines 48-54)

Art Unit: 2617

Koo fails to specifically disclose the access group classification having been generated by a core network node, which classified the user equipment unit into at least one of plural access groups. However, Mouly teaches the access group classification having been generated by a core network node (fig.1, core network 3, abstract, col.4, lines 17-27, claims 7 and 13), which classified the user equipment unit into at least one of plural access groups (abstract, col.2, line 39 to col.4, line 4, claim 13). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Mouly with Koo to provide a method for supplying services to mobile station.

Regarding claim 2, Mouly and Koo further teach the apparatus of claim 1, wherein the access group eligibility message indicates what subscriber groups are eligible to operate in the cell for which the access group eligibility message is transmitted (see Koo, fig.1-2, abstract, col.1, lines 48-54).

Regarding claim 3, Mouly and Koo further teach the apparatus of claim 1, wherein the access group eligibility message indicates what restriction groups are not eligible to operate in the cell for which the access group eligibility message is transmitted (see Koo, abstract, see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13).

Regarding claim 4, Mouly and Koo further teach the apparatus of claim 1, wherein the access group eligibility message includes a bitmap which indicates eligibility for plural access groups (see Koo, fig.2, col.2, lines 31-60).

Art Unit: 2617

Regarding claim 5, Mouly and Koo further teach the apparatus of claim 1, wherein a radio access network node transmits the access group eligibility message (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13), and further comprising a core network node (see Mouly, fig.1, core network 3) which, upon receipt of a location update request for the user equipment unit (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13), classifies the user equipment unit in at least one of plural access groups (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13) and generates for transmission to the user equipment unit through a radio access network an access group classification message which advises the user equipment unit as to which of the plural access groups the user equipment unit belongs (see Koo, abstract, see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13).

Regarding claim 6, Mouly and Koo further teach the apparatus of claim 5, wherein the user equipment unit stores an access group classification obtained from the access group classification message in a memory at the user equipment unit (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13).

Regarding claim 15, Mouly and Koo further teach the apparatus of claim 1, wherein the access group classification message is one of a location update response (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13) and a location update reject message (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13), which includes the access group classification (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13).

Art Unit: 2617

Regarding claim 16, Mouly and Koo further teach the apparatus of claim 1, wherein the access group classification message is one of a location update response (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13) and a location update reject message which includes the access group classification and a version field associated with the access group classification (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13).

Regarding claim 18 is rejected with the same reasons set forth in claim 16.

Regarding claim 42, Koo teaches a user equipment unit which receives over an air interface an access group classification message (fig.1) and an access group eligibility message (fig.1, element 14, 16, abstract), the access group classification message being generated by a core network node for advising the user equipment unit (fig.1, mobile station 12) as to which of the plural access groups the user equipment unit belongs (fig.1-2, abstract, col.1, lines 48-54), the access group eligibility message being generated by a radio access network node for specifying eligibility of plural access groups to operate in a cell for which the access group eligibility message is transmitted (fig.1-2, abstract, col.1, lines 48-54), the user equipment unit comprising:

compares the stored access group classification with contents of the access group eligibility message to determine whether the user equipment unit is allowed access to the cell for which the access group eligibility message is transmitted (fig.1-2, abstract, col.1, lines 48-54).

Art Unit: 2617

Koo fails to specifically disclose an access controller, which stores an access group classification obtained from the access group eligibility message. However, Mouly teaches an access controller (fig.1, core network 3, abstract, col.4, lines 17-27, claims 7 and 13), which stores an access group classification obtained from the access group eligibility message (abstract, col.2, line 39 to col.4, line 4, claim 13). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Mouly with Koo to provide a method for supplying services to mobile station.

Regarding claim 43, Mouly and Koo further teach the apparatus of claim 42, wherein the access group eligibility message indicates what subscriber groups are eligible to operate in the cell for which the access group eligibility message is transmitted (see Koo, fig.1-2, abstract, col.1, lines 48-54).

Regarding claim 44, Mouly and Koo further teach the apparatus of claim 42, wherein the access group eligibility message indicates what restriction groups are not eligible to operate in the cell for which the access group eligibility message is transmitted (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13).

Regarding claim 45, Mouly and Koo further teach the apparatus of claim 42, wherein the access group eligibility message includes a bitmap which indicates eligibility for plural access groups (see Koo, fig.2, col.2, lines 31-60).

Regarding claim 50, Mouly and Koo further teach the apparatus of claim 42, wherein the access group classification message is one of a location update response

Art Unit: 2617

(see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13) and a location update reject message which includes the access group classification (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13).

Regarding claim 51, Mouly and Koo further teach the apparatus of claim 42, wherein the access group classification message includes the access group classification (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13) and a version field associated with the access group classification (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13).

Regarding claim 54, Koo teaches a method of operating a telecommunications network comprising:

Transmitting (fig.1, base station 10, mobile station 12), in a broadcast channel over an air interface (fig.1), an access group eligibility message generated by a radio access network (fig.1-2, abstract);

a user equipment unit (fig.1, mobile station 12) which receives the access group eligibility message (fig.1-2, abstract) and which user the access group eligibility message to make determination whether the user equipment unit (fig.1, mobile station 12) is eligible to operate in a cell for which the access group eligibility message is transmitted (fig.1-2, abstract), involving a comparison of access group eligibility information transmitted in the access group message (fig.1-2, abstract) and

Koo fails to specifically disclose an access group classification, which is generated by a core network. However, Mouly teaches an access group classification

Art Unit: 2617

which is generated by a core network (fig.1, core network 3, abstract, col.2, line 39 to col.4, line 4, claim 13). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Mouly with Koo to provide a method for supplying services to mobile station.

Regarding claim 55, Mouly and Koo further teach the method of claim 54, further comprising including in the access group eligibility message an indication of what subscriber groups are eligible to operate in the cell for which the access group eligibility message is transmitted (see Koo, fig.1-2, col.1, lines 48-54).

Regarding claim 56, Mouly and Koo further teach the method of claim 54, further comprising including in the access group eligibility message an indication of what restriction groups are not eligible to operate in the cell for which the access group eligibility message is transmitted (see Koo, abstract, see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13).

Regarding claim 57, Mouly and Koo further teach the method of claim 54, further comprising including in the access group eligibility message a bitmap which indicates eligibility for plural access groups (see Koo, fig.2, col.2, lines 31-60).

Regarding claim 58 is rejected with the same reasons set forth in claim 5.

Regarding claim 59 is rejected with the same reasons set forth in claim 6.

Regarding claim 66, Mouly and Koo further teach the method of claim 54, further comprising:

Art Unit: 2617

upon the user equipment unit entering a new cell which involves a transition to a new location area (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13), checking the access group eligibility message transmitted for the new cell (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13); and

comparing the stored access group classification with contents of the access group eligibility message to determine whether the user equipment unit is allowed access to the new cell (see Koo, abstract, see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13).

Regarding claim 67, Mouly and Koo further teach the method of claim 66, further comprising, upon the user equipment unit entering a new cell which does not involve a transition to a new location area (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13), the user equipment unit not checking the access group eligibility message (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13).

Regarding claim 68, Mouly and Koo further teach the method of claim 54, wherein the access group classification message is one of a location update response (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13) and a location update reject message which includes the access group classification (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13).

Regarding claim 69 is rejected with the same reasons set forth in claim 18.

Regarding claim 71 is rejected with the same reasons set forth in claim 18.

Application/Control Number: 10/068,001 Page 10

Art Unit: 2617

Regarding claims 87-89, Mouly and Koo further teach the apparatus of claims 1, 42 and 54, where the access group eligibility information comprises a subscriber group having a composition pre-agreed with a network operator (see Mouly, abstract, col.2, line 39 to col.4, line 4, claim 13).

#### Allowable Subject Matter

3. Claims 7-14, 17,19, 46-49, 52-53, 60-65, 70 and 72 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M. Nguyen whose telephone number is 571.272.7923. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph feild can be reached on 571.272.4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/068,001 Page 11

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Khai Nguyen

Au: 2617

4/3/2007

SUPERVISORY PATENT EXAMINER